

REMARKS

This application has been reviewed in light of the Office Action mailed September 2, 2008. Reconsideration of this application in view of the below remarks is respectfully requested. Claims 1 – 27 are pending in the application with Claims 1, 2, 21, 23, 24 being in independent form. By the present amendment, Claims 1, 2, 21 and 23 are amended. No new subject matter is introduced into the disclosure by way of the present amendment.

I. Rejection of Claims 1 – 5, 7 – 9, 11 – 14 and 20 – 26 Under 35 U.S.C. § 103(a)

Claims 1 – 5, 7 – 9, 11 – 14 and 20 – 26 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over “Application of High Tc SQUID Magnetometer for Sentinel-Lymph Node Biopsy”, IEEE Transactions on Applied Superconductivity, Vol. 11, No. 1, pg. 665 – 668, March 2001 (hereinafter, “Tanaka”) in view of U.S. Patent No. 5,305,751 issued to Chopp et al. and further in view of U.S. Patent No. 4,843,504 issued to Barnes.

As admitted in the present Office Action, neither Tanaka nor Chopp disclose that any of the magnet, the combination of the magnet and the plurality of the magnetic sensors, and the combination of the magnet, the plurality of the magnetic sensors, and a preamplifier for amplifying the outputs from the plurality of the magnetic sensors, is vibrated or rotated.

Moreover, contrary to the assertion in the present Office Action, Barnes also fails to disclose that any of the magnet, the combination of the magnet and the plurality of the magnetic sensors, and the combination of the magnet, the plurality of the magnetic sensors, and a preamplifier for amplifying the outputs from the plurality of the magnetic sensors, is vibrated or rotated for modulating the magnetic distribution, as recited in amended Claims 1, 21 and 23.

Regarding Claim 24, Tanaka, Chopp and Barnes, taken alone or in any proper combination, fail to disclose or suggest that any of the magnet, the combination of the magnet

and the plurality of the magnetic sensors, and the combination of the magnet, the plurality of the magnetic sensors, and a preamplifier for amplifying the outputs from the plurality of the magnetic sensors, is vibrated in the direction parallel to a line or a plane including the plurality of the magnetic sensors.

Since Claim 2 recites: "...a modulating unit for modulating the magnetic distribution by vibrating or rotating any of the magnet, the combination of the magnet and the plurality of the magnetic sensors, and the combination of the magnet, the plurality of the magnetic sensors, and a preamplifier for amplifying the outputs from the plurality of the magnetic sensors..." Tanaka, Chopp and Barnes, taken alone or in any proper combination, fail to disclose or suggest Applicants' Claim 2.

Therefore, Claims 1 – 5, 7 – 9, 11 – 14 and 20 – 26 are believed to be allowable over the cited prior art references. Accordingly, Applicants respectfully request withdrawal of the rejection with respect to Claims 1 – 5, 7 – 9, 11 – 14 and 20 – 26 under 35 U.S.C. § 103(a) over Tanaka, in view of Chopp and further in view of Barnes.

II. Rejection of Claims 6, 10 and 17 – 19 Under 35 U.S.C. § 103(a)

Claims 6, 10 and 17 – 19 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over Tanaka in view of Chopp and Barnes and further in view of U.S. Patent No. 6,331,703 issued to Yarnall et al.

However, Claims 6, 10 and 17 – 19 depend from Claims 1 and 2 and thus include all the limitations recited therein. Yarnall does not overcome the above-identified deficiencies in Tanaka, Chopp and Barnes with respect to those independent claims, thus Claims 6, 10 and 17 – 19 are believed to be allowable for at least the reasons indicated above.

Accordingly, Applicants respectfully request withdrawal of the rejection with respect to Claims 6, 10 and 17 – 19 under 35 U.S.C. § 103(a) over Tanaka in view of Chopp and Barnes and further in view Yarnall.

III. Rejection of Claims 15 and 16 Under 35 U.S.C. § 103(a)

Claims 15 and 16 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over Tanaka in view of Chopp and Barnes and further in view of U.S. Patent No. 4,800,457 issued to Kryder et al.

The present Office Action concedes that Tanaka, Chopp and Barnes are silent with respect to the magnetic sensor comprising an MI (Magnetic Impedance) sensor or an MR (Magnetic Resistance) sensor. While, the Kryder reference discloses an MR sensor, Kryder too is silent with respect to an MI sensor.

However, Claims 15 and 16 depend from Claims 1 and 2 and thus include all the limitations recited therein. Kryder does not overcome the above-identified deficiencies in Tanaka, Chopp and Barnes with respect to those independent claims, thus Claims 15 and 16 are believed to be allowable for at least the reasons indicated above.

Accordingly, Applicants respectfully request withdrawal of the rejection with respect to Claims 15 and 16 under 35 U.S.C. § 103(a) over Tanaka in view of Chopp and Barnes and further in view Kryder.

IV. Rejection of Claims 22 and 27 Under 35 U.S.C. § 103(a)

The Examiner has rejected Claims 22 and 27 under 35 U.S.C. § 103(a) as allegedly obvious over Tanaka in view of Chopp and Barnes and further in view of U.S. Patent No. 5,559,340 issued to Nakamura et al.

However, Claims 22 and 27 depend from Claims 21 and 25 and thus include all the limitations recited therein. Nakamura does not overcome the above-identified deficiencies in Tanaka, Chopp and Barnes with respect to those independent claims, thus Claims 22 and 27 are believed to be allowable for at least the reasons indicated above.

Accordingly, Applicants respectfully request withdrawal of the rejection with respect to Claims 22 and 27 under 35 U.S.C. § 103(a) over Tanaka in view of Chopp and Barnes and further in view Nakamura.

It is noted that in Tanaka, Chopp, Barnes, Yarnall, Kryder and Nakamura a single magnetic sensor is used. In contrast, the present invention uses a plurality of magnetic sensors to realize the high magnetic sensitivity at a normal temperature.

In the conventional magnetic fluid detecting apparatus for identifying sentinel lymph nodes, it is necessary to use a SQUID element that is operative only at a very low temperature in order to detect a very weak magnetic field indicating that a magnetic fluid exists, as described in Tanaka. Hence, it is impossible to use SQUID elements in the body, since the very low temperatures to which the SQUID elements need to be cooled would have a detrimental affect on the living tissue.

In contrast to this, since the magnetic fluid detecting apparatus recited in the claims uses a plurality of magnetic sensors, the claimed magnetic fluid detecting apparatus can be used at a normal temperature. This feature allows the claimed invention to be applied directly to the body without adverse affect.

CONCLUSIONS

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1 – 27 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicant's undersigned attorney at the number indicated below.

Respectfully submitted,

/Thomas Spinelli/

Thomas Spinelli
Registration No. 39,533

SCULLY, SCOTT, MURPHY & PRESSER, P.C.
400 Garden City Plaza - Suite. 300
Garden City, New York 11530
(516) 742-4343

TS/DAT/ech